#### INFORMATION SCIENCE PUBLISHING



701 E. Chocolate Avenue, Suite 200, Hershey PA 17033, USA Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

ITB11044

This chapter appears in the book, Advanced Methods in Distance Education: Applications and Practices for Educators, Administrators and Learners authored by Kim Dooley, James Lindner and Larry Dooley © 2005, Idea Group Inc.

## **Chapter X**

# **Delivery Technology**

with
Walt Magnussen, Texas A&M University, USA



## **Making Connections**

It is our belief that everyone should understand the basic technical lingo of the profession, so this chapter will give you an overview of the tools of the trade. A major consideration when developing a new course or program at a distance is the selection of the delivery technology. You may even have to decide upon specifications for equipment and modify existing space. In the previous section of the book, we explored the principles of instructional design needed to be successful in distance education. Now we will address technology knowledge and skills. You will gain an understanding of the technology being used in the instructional environment, as well as the server capacity for storing data. Of particular importance is the need for instructors and designers to understand that learners have variable access to and abilities with the delivery technologies. Moreover, instruction must be designed for multiplatform use and for future technology development. How do you select or design the learning interface? What combination of technologies and delivery strategies promote engagement and interaction? What are issues with bandwidth and access that impact both instructors and learners?

### Introduction

We have previously discussed instructional design and adult learning principles; what you need to know at this point is which delivery technologies will be most appropriate for the design. Some instructors, and usually always vendors, advocate one delivery strategy. We believe that the use of a variety of delivery strategies results in deeper and more meaningful learning. While not based on research, Dale's (1969) Cone of Experience (Figure 1) describes a model for the level of abstractness of various audiovisual media. This model is widely used and provides a nice framework from which to consider delivery strategies appropriate for distance education. Although some researchers have reported percentages of learner retention based upon the type of media, Dale did not offer such recommendations. More direct and purposeful experiences should be used to develop psychomotor skills and more abstract and textural material to enhance higher cognitive development. We also purport that learners have diverse learning needs and preferences, and that the use of blended technologies will improve the ability to reach more learners.

The history of distance learning as a delivery vehicle for formal education has it roots in correspondence study. It later evolved to radio signals and prerecorded media. Later, the information age brought forth the technology tools that we know and use in distance education. In this chapter, we will discuss the following tools: print, audio, audio and video, and computer. We will complete this chapter with a discussion of the Internet and World Wide Web with a description of Web tools for online instruction.



#### **Internet Connection**

http://www.work-learning.com/chigraph.htm

For an interesting discussion on Dale's Cone of Experience, see the Work Learning Research page.

# 18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <a href="www.igi-global.com/chapter/delivery-technology/4268">www.igi-global.com/chapter/delivery-technology/4268</a>

#### Related Content

#### Project based Case Learning and Massive Open Online Courses

Bo Jianand Cheng Yang (2015). *International Journal of Distance Education Technologies (pp. 53-60).* 

www.irma-international.org/article/project-based-case-learning-and-massive-open-online-courses/128415

# The Lack of IT on Post-Conflict Regions: Calls for Increased Technology in Education Systems – Case Study Kosovo

Halime Cocaj (2022). *International Journal of Information and Communication Technology Education (pp. 1-23).* 

www.irma-international.org/article/the-lack-of-it-on-post-conflict-regions/315613

#### Multimedia Content Development

France Belangerand Dianne H. Jordan (2000). *Evaluation and Implementation of Distance Learning: Technologies, Tools and Techniques (pp. 129-170).*www.irma-international.org/chapter/multimedia-content-development/18638

#### Enhancing the IMS QTI to Better Support Computer Assisted Marking

Damien Clarkand Penny Baillie-de Byl (2009). *Methods and Applications for Advancing Distance Education Technologies: International Issues and Solutions (pp. 174-189).* 

www.irma-international.org/chapter/enhancing-ims-qti-better-support/26401

#### Case Study of a Blind Computer Graphics Student's Online Interactions

Deller James Ferreira, Tatiane F. N. Meloand Luciana Oliveira Berretta (2021). *International Journal of Information and Communication Technology Education (pp. 72-87).* 

 $\underline{www.irma-international.org/article/case-study-of-a-blind-computer-graphics-students-online-interactions/267725}$